



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/893,938	06/27/2001	Raouf Botros	SDP273PA	6293

7590

12/23/2003

Law Office of Barbara Joan Haushalter
228 Bent Pines Court
Bellefontaine, OH 43311

EXAMINER

SHOSHO, CALLIE E

ART UNIT

PAPER NUMBER

1714

DATE MAILED: 12/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/893,938

Applicant(s)

BOTROS ET AL.

Examiner

Callie E. Shosho

Art Unit

1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,5,7-14 and 17-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,5,7-14,17-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

1. All outstanding rejections are overcome by applicants' amendment filed 11/21/03.

In light of the new grounds of rejection as set forth below, the finality of the previous office action mailed 9/18/03 has been withdrawn and thus, the following action is non-final.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1, 9-14, 17-18, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bates et al. (U.S. 5,958,999) in view of either Gundlach et al. (U.S. 6,258,873) or Moffatt et al. (U.S. 6,323,257).

Bates et al. disclose ink comprising water, 0.01-10% ethoxylated polyethyleneimine, ammonium sulfate, biocide, surfactant, humectant including alcohol, and dimethylethanolamine to modify the pH. It is disclosed that the pH of the ink is greater than 7 (col.3, lines 37-39, col.5, lines 58-61, col.6, lines 27-38, col.7, lines 26-27, and col.17, lines 55-56).

The difference between Bates et al. and the present claimed invention is the requirement in the claims of (a) thickener and (b) amount of dimethylethanolamine.

With respect to difference (a), Gundlach et al. which is drawn to ink jet inks, disclose the use of 0.1-5% viscosity building compound such as guar gum (col.17, lines 53-59 and col.18, lines 7-12).

Alternatively, Moffatt et al., which is drawn to ink jet inks, disclose the use of up to 3% guar gum in order to improve optical density and print quality of the ink (col.17, lines 27-31 and 34).

In light of the motivation for using thickener, i.e. guar gum, disclosed by either Gundlach et al. or Moffatt et al. as described above, it therefore would have been obvious to one of ordinary skill in the art to use guar gum in the ink of Bates et al. in order to produce ink with

desired viscosity, or alternatively, improved optical density and print quality, and thereby arrive at the claimed invention.

With respect to difference (b), there is no explicit disclosure in Bates et al. of the amount of dimethylethanolamine utilized. From example 16, it is clear that dimethylethanolamine is used to control the pH of the ink. Thus, it therefore would have been obvious to one of ordinary skill in the art to choose amounts of dimethylethanolamine, including those presently claimed, to control the pH of the ink to desired values.

5. Claims 5 and 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bates et al. in view of Gundlach et al. or Moffatt et al. as applied to claims 1, 9-14, 17-18, and 20 above, and further in view of Kashiwazaki et al. (U.S. 6,011,098).

The difference between Bates et al. in view of Gundlach et al. or Moffatt et al. and the present claimed invention is the requirement in the claims of specific type and amount of surfactant.

Bates et al. broadly disclose the use of surfactant with no disclosure of specific types or amounts utilized.

Kashiwazaki et al., which is drawn to ink jet inks, disclose the use of 0.01-5% surfactants including anionic and nonionic surfactant in order to produce ink with specific surface tension so that the ink possess good wetting properties and therefore print properly from printer (col.8, lines 29-47).

In light of the above, it therefore would have been obvious to one of ordinary skill in the art to use anionic or nonionic surfactant in Bates et al. in amounts, including that presently claimed, in order to produce ink with good wetting properties and thus good printing properties, and thereby arrive at the claimed invention.

6. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bates et al. in view of Gundlach et al. or Moffatt et al. as applied to claims 1, 9-14, 17-18, and 20 above, and further in view of Hayes (U.S. 4,150,997).

The difference between Bates et al. in view of Gundlach et al. or Moffatt et al. and the present claimed invention is the requirement in the claims of fluorescent dye.

Bates et al. discloses the use of dyes, however, there is no disclosure of fluorescent dyes as presently claimed.

Hayes, which is drawn to ink jet inks, disclose the use of fluorescent dyes in order to improve the contrast between the writing medium and the ink (col.2, lines 14-16).

In light of the motivation for using fluorescent dye disclosed by Hayes as described above, it therefore would have been obvious to one of ordinary skill in the art to use fluorescent dye in the ink of Bates et al. in order to improve the contrast between the writing medium and the ink, and thereby arrive at the claimed invention.

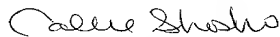
Application Number: 09/893,938
Art Unit: 1714

Page 6

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 571-272-1123. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



Callie E. Shosho
Primary Examiner
Art Unit 1714

CS
12/11/03